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HARRINGTON & SMITH, LLP			PEREZ GUTIERREZ, RAFAEL	
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2686

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995,096

Applicant(s)

Tuutijärvi

Examiner

Rafael Perez-Gutierrez

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application:
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2686

DETAILED ACTION

1. This Action is in response to Applicant's amendment filed on December 29, 2004.

Claims 1-9 are still pending in the present application. **This Action is made FINAL.**

Priority

2. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119(e) as follows:

An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence(s) of the specification or in an application data sheet by identifying the prior application by application number (37 CFR 1.78(a)(2) and (a)(5)). If the prior application is a non-provisional application, the specific reference must also include the relationship (i.e., continuation, divisional, or continuation-in-part) between the applications except when the reference is to a prior application of a CPA assigned the same application number.

Drawings

3. New replacement drawings are required in this application. See the attached Notice of Draftsperson's Patent Drawing Review for appropriate corrections.

Art Unit: 2686

4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office Action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended”. If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the Examiner, the Applicant will be notified and informed of any required corrective action in the next Office Action. If a response to the present Office Action fails to include proper drawing corrections, corrected drawings or arguments therefor, the response can be held **NON-RESPONSIVE** and/or the application could be **ABANDONED** since the objections/corrections to the drawings are no longer held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities:

- a) On **page 7 line 25**, replace “(BST5” with “(BTS 5” after “forward”; and

Art Unit: 2686

b) On **page 8 line 38**, delete “2” after “slot”.

Appropriate correction is required.

Claim Objections

6. **Claims 1 and 2** are objected to because of the following informalities:

a) On **line 8 of claim 1**, replace “the” with --a-- after “that” in order to provide proper antecedent basis to “received signal”;

b) On **line 12 of claim 1**, replace “and” with --an-- after “obtain”; and

c) On **line 17 of claim 2**, replace “the” with --a-- after “of” in order to provide proper antecedent basis to “measurement”.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

Art Unit: 2686

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. **Claim 1** is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Ishi (U.S Pat. No. 5,867,786) and Kobylinski et al. (U.S Pat. No. 6,044,272) in view of Raith et al. (U.S Pat. No. 6,028,854), further in view of IBM Technical Disclosure Bulletin (TDB-Acc-No. NN9108386), even further in view of Kangras et al. (U.S. P.G.-Pub. No. 2002/0016172).

Regarding **claim 1**, Ishi discloses a system for monitoring transmission carriers, comprising: a mobile unit (*item 2; Fig. 8*) receiving a command from a serving base station (*zone f_A*) through a control channel to monitor the carriers from peripheral zones or neighboring service cells adjacent to the serving station (*col. 9, lines 58-63; Fig. 14*), wherein a base station is assigned to each cell (*col. 3, lines 39-50*), receiving the transmissions and measuring the field of strength magnitude from those transmissions, furthermore making a determination to perform channel switching or zone shifting ("handoff") (*col. 5, lines 13-26*), in the process of the aforesaid determination verifying if the carrier transmissions from the neighboring service cells are true carriers or corresponding carrier transmissions (*col. 5, lines 39-50*), the process comprising the steps of detecting and comparing data such as a color code in a speech or traffic channel (*col. 9, lines 12-16; Fig. 7*) transmitted by a received carrier with one color code previously stored in the mobile unit, subsequently if a match is found between both color codes,

Art Unit: 2686

the authenticity of the received carrier is established (*col. 5, lines 59-64; col. 6, lines 34-42; col. 8, lines 24-30 and lines 46-51; col. 9, line 58 thru col. 10, line 7*). Furthermore, Ishi discloses the incorporation of a traffic channel (speech channel) for handling speech data (*col. 9, lines 12-27*), receiving from a base station (i.e. a base station from a peripheral zone) the digital traffic channel time slot (*Fig. 7*) and switching channels (i.e. when handoff occurs, TCH, FACCH). Ishi fails to clearly specify the received traffic channel time slot on the same frequency with a control channel, decoding a Coded Digital Voice Color Code (CDVCC) in the DTC to obtain a DVCC, and wherein measuring comprises an Enhanced Observed Time Difference (E-OTD) measurement, and associating the channel structure or information (DVCC, channel number and hyperband information) with said measurement that is transmitted to a Serving Mobile Location Center (SLMC).

In the same field of endeavor, Kobylinski et al. disclose a system and method for improved mobile assisted handoff, wherein a mobile station receives measurements orders from a serving base station, subsequently making received signal strength (RSS) measurements according to the measurements order (*col. 4, lines 39-52*), reading and decoding a coded DVCC (CDVCC) to identify candidate channels for handoff (*col. 4, lines 52-67*), reporting back to said serving station for performing handoff, and subsequently the serving base station and a mobile switching center (MSC) making a determination for handoff (*col. 5, lines 3-11*). Kobylinski et al. suggest wherein a DCCH and a DTC are in the same frequency (IS-136 standard; *col. 1, lines 1-32; col. 3, lines 59-64*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the

Art Unit: 2686

invention was made to have Ishi system for monitoring transmission carriers to include a Coded Digital Voice Color Code in a Digital Channel structure for IS-136 systems as taught by Kobylinski et al. for the purpose of identifying the most appropriate base stations and accurately perform handoffs.

Ishi in view of Kobylinski et al. fail to clearly specify wherein measuring comprises an Enhanced Observed Time Difference (E-OTD) measurement, and associating the channel structure or information (DVCC, channel number and hyperband information) with said measurement.

In the same field of endeavor Raith et al. disclose a TDMA environment (IS-136) that defines a digital traffic channel DTC slot format comprising a cell identifier that identifies a base station such as a Coded Digital Verification Code (CDVCC) and a pointer used for indicating on which frequency or set of frequencies a digital control channel is more likely to be found (Coded Digital Control Channel Locator (CDL)) (*col. 4, line 47 thru col. 5, line 3*). Furthermore Raith et al. disclose wherein both traffic and control channels share the same radio carrier frequency (*col. 4, lines 8-12*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ishi in view of Kobylinski et al. system for monitoring transmission carriers and accurately performing handoff to have control and traffic channels sharing the same radio carrier frequency as taught by Raith et al. for the purpose of improving efficiency, hardware costs and allowing flexible use of the radio spectrum.

The combination of Ishi and Kobylinski et al. in view of Raith et al. fail to clearly specify

Art Unit: 2686

wherein measuring comprises an Enhanced Observed Time Difference (E-OTD) measurement, and associating the channel structure or information (DVCC, channel number and hyperband information) with said measurement.

In the same field of endeavor, IBM Technical Disclosure Bulletin NN9108386 discloses for determining location, wherein digital control channels transmit digital information comprises a "Data Color Code" for differentiating data, furthermore said "Data Color Code" and the frequency of the transmission are utilized or associated for determining the location of a transmitter (*Page 2, lines 7-14*) with location based techniques based techniques such as triangulation (*Pages 1, line 28 thru Page 2, line 7*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have the combination of Ishi and Kobylinski et al. in view of Raith et al. system for monitoring transmission carriers and accurately performing handoff to have location based techniques associated with time slot information as taught by article NN9108386 for the purpose of accurately determining the position of transmitters.

The combination of Ishi and Kobylinski et al. in view of Raith et al., further in view of article NN9108386 fail to clearly specify wherein the location measurement is an Enhanced Observed Time Difference (E-OTD) measurement.

In the same field of endeavor, Kangras et al. disclose mobile station position methods such as the Enhanced-Observed Time Difference (E-OTD) method, based on measuring the time-of-arrival (TOA) of bursts transmitted from a BS on its broadcast control channel (BCCH) carrier (*Page 1, Paragraph 3*).

Art Unit: 2686

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have the combination of Ishi and Kobylinski et al. in view of Raith et al., further in view of article NN9108386 system for monitoring transmission carriers and accurately performing handoff associated with location based techniques associated with time slot information to perform location determining such as Enhanced-Observed Time Difference as taught by Kangras et al. for the purpose of obtaining location from both the mobile station and the base station in a synchronized wireless communication system.

9. **Claims 2 and 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishi (U.S. Pat. No. 5,867,786) in view of Raith et al. (U.S. Pat. No. 6,028,854).

Regarding **claim 2**, Ishi discloses a method for making measurements of neighbor base stations with a mobile station, comprising steps of receiving transmissions of neighbor or peripheral base stations or a command for monitoring the peripheral base stations (*col. 3, lines 59-65; col. 9, lines 58-63*), the transmissions including information for identifying at least one neighbor base station that transmits a frequency channel to be measured (Color Code; *col. 8, lines 24-30; Fig. 4*); tuning to a frequency channel transmitted by the neighbor base station (Monitoring the carriers of the peripheral base stations; *col. 5, lines 39-44*), the frequency channel containing a control channel used for making a measurement (*col. 9, lines 4-6; Fig. 4*); verifying that the frequency channel is a correct frequency channel transmitted by the neighbor base station to be measured (Verifying the existence of significant data in a control channel to identify a carrier transmission; *col. 5, lines 52-54*); receiving a traffic channel (*col. 9, lines 14-*

Art Unit: 2686

21) and extracting from the received traffic channel certain information that can be used to identify the base station that transmits the traffic channel (*Color Code; Fig. 7*); comparing the extracted information with the information for identifying a neighbor base station that was received in the measurement list or command for monitoring peripheral base stations to ensure that the correct frequency channel is being received (detecting and comparing data such as a color code in a speech or traffic channel transmitted by a received carrier with one color code previously stored in the mobile unit, subsequently if a match is found between both color codes, the authenticity of the received carrier is established; *col. 5, lines 39-50 and lines 59-64; col. 6, lines 34-42; col. 8, lines 24-30 and lines 46-51 col. 9, lines 12-16; col. 9, line 58 thru col. 10, line 7; Fig. 7*); and associating the extracted information with the result of the measurement (Associating the extracted data for verifying carrier transmission with and a received electric field strength measurement for appropriately switching to a channel; *col. 5, lines 27-50; col. 10, line 9 thru col. 11, line 13*). Ishi fails to clearly specify receiving a traffic channel that is on the same frequency channel.

In the same field of endeavor Raith et al. disclose a TDMA environment (IS-136) that defines a digital traffic channel DTC slot format comprising a cell identifier that identifies a base station such as a Coded Digital Verification Code (CDVCC) and a pointer used for indicating on which frequency or set of frequencies a digital control channel is more likely to be found (Coded Digital Control Channel Locator (CDL)) (*col. 4, line 47 thru col. 5, line 3*). Furthermore Raith et al. disclose wherein both traffic and control channels share the same radio carrier frequency (*col. 4, lines 8-12*).

Art Unit: 2686

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ishi system for monitoring transmission carriers to have control and traffic channels sharing the same radio carrier frequency as taught by Raith et al. for the purpose of improving efficiency, hardware costs and allowing flexible use of the radio spectrum.

Regarding **claim 6**, Ishi discloses a mobile station comprising an RF transceiver having an RF transmitter and an RF receiver (*Fig. 1, item 15; Fig. 2, items 21 and 22*), said mobile station further comprising a controller coupled to the RF transceiver and being programmed for making measurements of neighbor base stations (*Fig. 1, items 15-18; Fig. 2, item 25*), said controller being programmed to (a) receiving a command for measuring or monitoring the carriers from peripheral base stations from a serving base station (*col. 9, lines 57-65*), containing information for identifying at least one neighbor base station that transmits a frequency channel (*col. 9, lines 28-38*); (b) to tune said RF receiver to a frequency channel transmitted by the neighbor base station, the frequency channel containing a control channel used for making a measurement (*col. 10, line 9 thru col. 11, line 13*); (c) to verify that the frequency channel is a correct frequency channel transmitted by the neighbor base station to be measured by receiving a traffic channel (*col. 9, lines 14-21*) and by extracting from the received traffic channel certain information that can be used to identify the base station that transmits the traffic channel (*Color Code; Fig. 7*); (d) to compare the extracted information with the information for identifying the at least one neighbor base station that was received in the measurement list to ensure that the correct frequency channel is being received (detecting and comparing data such as a color code in a speech or traffic channel transmitted by a received carrier with one color code previously

Art Unit: 2686

stored in the mobile unit, subsequently if a match is found between both color codes, the authenticity of the received carrier is established; *col. 5, lines 39-50 and lines 59-64; col. 6, lines 34-42; col. 8, lines 24-30 and lines 46-51 col. 9, lines 12-16; col. 9, line 58 thru col. 10, line 7; Fig. 7*); and (e) to associate the extracted information with the result of a measurement (Associating the extracted data for verifying carrier transmission with and a received electric field strength measurement for appropriately switching to a channel; *col. 5, lines 27-50; col. 10, line 9 thru col. 11, line 13*). Ishi fails to clearly specify receiving a traffic channel that is on the same frequency channel.

In the same field of endeavor Raith et al. disclose a TDMA environment (IS-136) that defines a digital traffic channel DTC slot format comprising a cell identifier that identifies a base station such as a Coded Digital Verification Code (CDVCC) and a pointer used for indicating on which frequency or set of frequencies a digital control channel is more likely to be found (Coded Digital Control Channel Locator (CDL)) (*col. 4, line 47 thru col. 5, line 3*). Furthermore Raith et al. disclose wherein both traffic and control channels share the same radio carrier frequency (*col. 4, lines 8-12*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ishi system for monitoring transmission carriers to have control and traffic channels sharing the same radio carrier frequency as taught by Raith et al. for the purpose of improving efficiency, hardware costs and allowing flexible use of the radio spectrum.

10. **Claims 3 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishi (U.S

Art Unit: 2686

Pat. No. 5,867,786) in view of Raith et al. (U.S Pat. No. 6,028,854), further in view of Kangras et al. (U.S. P.G.-Pub. No. 2002/0016172).

Regarding **claim 3**, and as applied to claim 2, Ishi in view of Raith et al. disclose the aforementioned method. Ishi in view of Raith et al. fail to clearly specify wherein the measurement is an Enhanced Observed Time Difference (E-OTD) measurement.

In the same field of endeavor, Kangras et al. disclose mobile station position methods such as the Enhanced-Observed Time Difference (E-OTD) method, based on measuring the time-of-arrival (TOA) of bursts transmitted from a BS on its broadcast control channel (BCCH) carrier (*Page 1, Paragraph 3*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ishi in view of Raith et al. system for monitoring transmission carriers and accurately performing handoff to perform location determining such as Enhanced-Observed Time Difference as taught by Kangras et al. for the purpose of obtaining location from both the mobile station and the base station in a synchronized wireless communication system.

Regarding **claim 7**, and as applied to claim 6, Ishi in view of Raith et al. disclose the aforementioned mobile station. Ishi in view of Raith et al. fail to clearly specify wherein the measurement is an Enhanced Observed Time Difference (E-OTD) measurement.

In the same field of endeavor, Kangras et al. disclose mobile station position methods such as the Enhanced-Observed Time Difference (E-OTD) method, based on measuring the time-of-arrival (TOA) of bursts transmitted from a BS on its broadcast control channel (BCCH) carrier (*Page 1, Paragraph 3*).

Art Unit: 2686

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ishi in view of Raith et al. system for monitoring transmission carriers and accurately performing handoff to perform location determining such as Enhanced-Observed Time Difference as taught by Kangras et al. for the purpose of obtaining location from both the mobile station and the base station in a synchronized wireless communication system.

11. **Claims 4 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishi (U.S. Pat. No. 5,867,786) in view of Raith et al. (U.S. Pat. No. 6,028,854), further in view of Kobylinski et al. (U.S. Pat. No. 6,044,272).

Regarding **claim 4**, and as applied to claim 2, Ishi in view of Raith et al. disclose the aforementioned method. In addition Raith et al. disclose wherein the information is comprised of a Digital Voice Color Code (DVCC) (*Figs. 3A and 3B, CDVCC*), and a Digital Traffic Channel (DTC) that is in the same RF channel with a Digital Control Channel (DCCH) used for the measurement (Both traffic and control channels share the same radio carrier frequency; *col. 4, lines 8-12 and lines 18-21*). Ishi in view of Raith et al. fail to clearly specify the step of decoding a Coded Digital Voice Color Code (CDVCC) field that comprises a part of a Digital Traffic Channel (DTC).

In the same field of endeavor, Kobylinski et al. disclose a system and method for improved mobile assisted handoff, wherein a mobile station receives measurements orders from a serving base station, subsequently making received signal strength (RSS) measurements according to the measurements order (*col. 4, lines 39-52*), reading and decoding a coded DVCC

Art Unit: 2686

(CDVCC) to identify candidate channels for handoff (*col. 4, lines 52-67*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ishi in view of Raith et al. system for monitoring transmission carriers and accurately performing handoff to include a Coded Digital Voice Color Code in a Digital Channel structure for IS-136 systems as taught by Kobylinski et al. for the purpose of identifying the most appropriate base stations and accurately perform handoffs.

Regarding **claim 8**, and as applied to claim 6, Ishi in view of Raith et al. disclose the aforementioned mobile station. In addition Raith et al. disclose wherein the information is comprised of a Digital Voice Color Code (DVCC) (*Figs. 3A and 3B, CDVCC*), and a Digital Traffic Channel (DTC) that is in the same RF channel with a Digital Control Channel (DCCH) used for the measurement (Both traffic and control channels share the same radio carrier frequency; *col. 4, lines 8-12 and lines 18-21*). Ishi in view of Raith et al. fail to clearly specify the step of decoding a Coded Digital Voice Color Code (CDVCC) field that comprises a part of a Digital Traffic Channel (DTC).

In the same field of endeavor, Kobylinski et al. disclose a system and method for improved mobile assisted handoff, wherein a mobile station receives measurements orders from a serving base station, subsequently making received signal strength (RSS) measurements according to the measurements order (*col. 4, lines 39-52*), reading and decoding a coded DVCC (CDVCC) to identify candidate channels for handoff (*col. 4, lines 52-67*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ishi in view of Raith et al. system for monitoring transmission

Art Unit: 2686

carriers and accurately performing handoff to include a Coded Digital Voice Color Code in a Digital Channel structure for IS-136 systems as taught by Kobylinski et al. for the purpose of identifying the most appropriate base stations and accurately perform handoffs.

12. **Claims 5 and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Ishi (U.S. Pat. No. 5,867,786) and Raith et al. (U.S. Pat. No. 6,028,854) in view of Kobylinski et al. (U.S. Pat. No. 6,044,272), further in view of IBM Technical Disclosure Bulletin (TDB-Acc-No. NN9108386), even further in view of Kangras et al. (U.S. P.G.-Pub. No. 2002/0016172).

Regarding **claim 5**, and as applied to claim 2, Ishi in view of Raith et al. disclose the aforementioned method, wherein the information is comprised of a Digital Voice Color Code (DVCC) and a Digital Traffic Channel (DTC) that is in the same RF channel with a Digital Control Channel (DCCH). Ishi in view of Raith fail to clearly specify), and where said controller, when extracting said certain information, decodes a Coded Digital Voice Color Code (CDVCC) field that comprises a part of a Digital Traffic Channel (DTC) where said controller, when associating the extracted information with the result of a measurement, includes a channel number, a hyperband and the DVCC with the result of the E-OTD measurement that is reported to a wireless network from a mobile station.

In the same field of endeavor, Kobylinski et al. disclose a system and method for improved mobile assisted handoff, wherein a mobile station receives measurements orders from a serving base station, subsequently making received signal strength (RSS) measurements

Art Unit: 2686

according to the measurements order (*col. 4, lines 39-52*), reading and decoding a coded DVCC (CDVCC) to identify candidate channels for handoff (*col. 4, lines 52-67*), and reporting the candidate channel measurements to a mobile switching center (MSC) (*col. 5, lines 3-9*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ishi in view of Raith et al. system for monitoring transmission carriers and accurately performing handoff to include a Coded Digital Voice Color Code in a Digital Channel structure for IS-136 systems as taught by Kobylinski et al. for the purpose of identifying the most appropriate base stations and accurately perform handoffs.

The combination of Ishi and Raith in view of Kobylinski et al. fail to clearly specify wherein measuring comprises an Enhanced Observed Time Difference (E-OTD) measurement, and associating the channel structure or information (DVCC, channel number and hyperband information) with said measurement.

In the same field of endeavor, IBM Technical Disclosure Bulletin NN9108386 discloses for determining location, wherein digital control channels transmit digital information comprises a "Data Color Code" for differentiating data, furthermore said "Data Color Code" and the frequency of the transmission are utilized or associated for determining the location of a transmitter (*Page 2, lines 7-14*) with location based techniques based techniques such as triangulation (*Pages 1, line 28 thru Page 2, line 7*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have the combination of Ishi and Raith in view of Kobylinski et al. system for monitoring transmission carriers and accurately performing handoff to have location

Art Unit: 2686

based techniques associated with time slot information as taught by article NN9108386 for the purpose of accurately determining the position of transmitters.

The combination of Ishi and Raith in view of Kobylinski et al., further in view article NN9108386 fail to clearly specify wherein the location measurement is an Enhanced Observed Time Difference (E-OTD) measurement.

In the same field of endeavor, Kangras et al. disclose mobile station position methods such as the Enhanced-Observed Time Difference (E-OTD) method, based on measuring the time-of-arrival (TOA) of bursts transmitted from a BS on its broadcast control channel (BCCH) carrier (*Page 1, Paragraph 3*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have the combination of Ishi and Raith in view of Kobylinski et al., further in view article NN9108386 system for monitoring transmission carriers and accurately performing handoff associated with location based techniques associated with time slot information to perform location determining such as Enhanced-Observed Time Difference as taught by Kangras et al. for the purpose of obtaining location from both the mobile station and the base station in a synchronized wireless communication system.

Regarding **claim 9**, and as applied to claim 6, Ishi in view of Raith et al. disclose the aforementioned mobile station wherein the information is comprised of a Digital Voice Color Code (DVCC) and a Digital Traffic Channel (DTC) that is in the same RF channel with a Digital Control Channel (DCCH). Ishi in view of Raith fail to clearly specify), and where said controller, when extracting said certain information, decodes a Coded Digital Voice Color Code (CDVCC)

Art Unit: 2686

field that comprises a part of a Digital Traffic Channel (DTC) where said controller, when associating the extracted information with the result of a measurement, includes a channel number, a hyperband and the DVCC with the result of the E-OTD, and reports the result of the measurement by transmitting the result through said RF transmitter.

In the same field of endeavor, Kobylinski et al. disclose a system and method for improved mobile assisted handoff, wherein a mobile station receives measurements orders from a serving base station, subsequently making received signal strength (RSS) measurements according to the measurements order (*col. 4, lines 39-52*), reading and decoding a coded DVCC (CDVCC) to identify candidate channels for handoff (*col. 4, lines 52-67*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ishi in view of Raith et al. system for monitoring transmission carriers and accurately performing handoff to include a Coded Digital Voice Color Code in a Digital Channel structure for IS-136 systems as taught by Kobylinski et al. for the purpose of identifying the most appropriate base stations and accurately perform handoffs.

The combination of Ishi and Raith in view of Kobylinski et al. fail to clearly specify wherein measuring comprises an Enhanced Observed Time Difference (E-OTD) measurement, and associating the channel structure or information (DVCC, channel number and hyperband information) with said measurement.

In the same field of endeavor, IBM Technical Disclosure Bulletin NN9108386 discloses for determining location, wherein digital control channels transmit digital information comprises a "Data Color Code" for differentiating data, furthermore said "Data Color Code" and the

Art Unit: 2686

frequency of the transmission are utilized or associated for determining the location of a transmitter (*Page 2, lines 7-14*) with location based techniques based techniques such as triangulation (*Pages 1, line 28 thru Page 2, line 7*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have the combination of Ishi and Raith in view of Kobylinski et al. system for monitoring transmission carriers and accurately performing handoff to have location based techniques associated with time slot information as taught by article NN9108386 for the purpose of accurately determining the position of transmitters.

The combination of Ishi and Raith in view of Kobylinski et al., further in view article NN9108386 fail to clearly specify wherein the location measurement is an Enhanced Observed Time Difference (E-OTD) measurement.

In the same field of endeavor, Kangras et al. disclose mobile station position methods such as the Enhanced-Observed Time Difference (E-OTD) method, based on measuring the time-of-arrival (TOA) of bursts transmitted from a BS on its broadcast control channel (BCCH) carrier (*Page 1, Paragraph 3*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have the combination of Ishi and Raith in view of Kobylinski et al., further in view article NN9108386 system for monitoring transmission carriers and accurately performing handoff associated with location based techniques associated with time slot information to perform location determining such as Enhanced-Observed Time Difference as taught by Kangras et al. for the purpose of obtaining location from both the mobile station and

Art Unit: 2686

the base station in a synchronized wireless communication system.

Response to Arguments

13. Applicant's arguments filed December 29, 2004 have been fully considered but they are not persuasive.

Consider **claim 1**, in response to Applicant's arguments, on pages 7 and 8 of the remarks, against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the present application, Applicant basically argues against each reference individually while the rejection of claim 1 above must be considered as whole (i.e., all the references as properly combined). For example, Applicant argues that Ishi, Kobylinski et al., and Raith et al., do not relate to terminal location measurement. The Examiner disagrees with this argument because, as explained in the rejection above, it is Kangras et al. and the IBM disclosure bulletin that teach data color code, E-OTD, and TOA for terminal location and positioning measurements.

Consider **claims 2 and 6**, in response to Applicant's argument that the references fail to show certain features of Applicant's invention, it is worth noting that the features upon which Applicant relies (i.e., location measurements and terminal location) are not recited in rejected claims 2 and 6. Although the claims are interpreted in light of the specification, limitations from

Art Unit: 2686

the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Moreover, even if these limitations were added to claims 2 and 6, the same rejection as explained above for claim 1 would applied.

Therefore, in view of the above reasons and having addressed Applicant's argument, the previous rejection is maintained and made FINAL by the Examiner.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. Any response to this Office Action should be **faxed to (703) 872-9306 or mailed to:**

Commissioner for Patents
P.O. Box 1450

Art Unit: 2686

Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

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Randolph Building
401 Dulany Street
Alexandria, VA 22314

16. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Rafael Perez-Gutierrez whose telephone number is (571) 272-7915. The Examiner can normally be reached on Monday-Thursday from 6:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-

Art Unit: 2686

2600.

A handwritten signature in black ink, appearing to read 'Rafael Perez-Gutierrez', written in a cursive style.

Rafael Perez-Gutierrez

R.P.G./rpg **RAFAEL PEREZ-GUTIERREZ**
PATENT EXAMINER

May 24, 2005